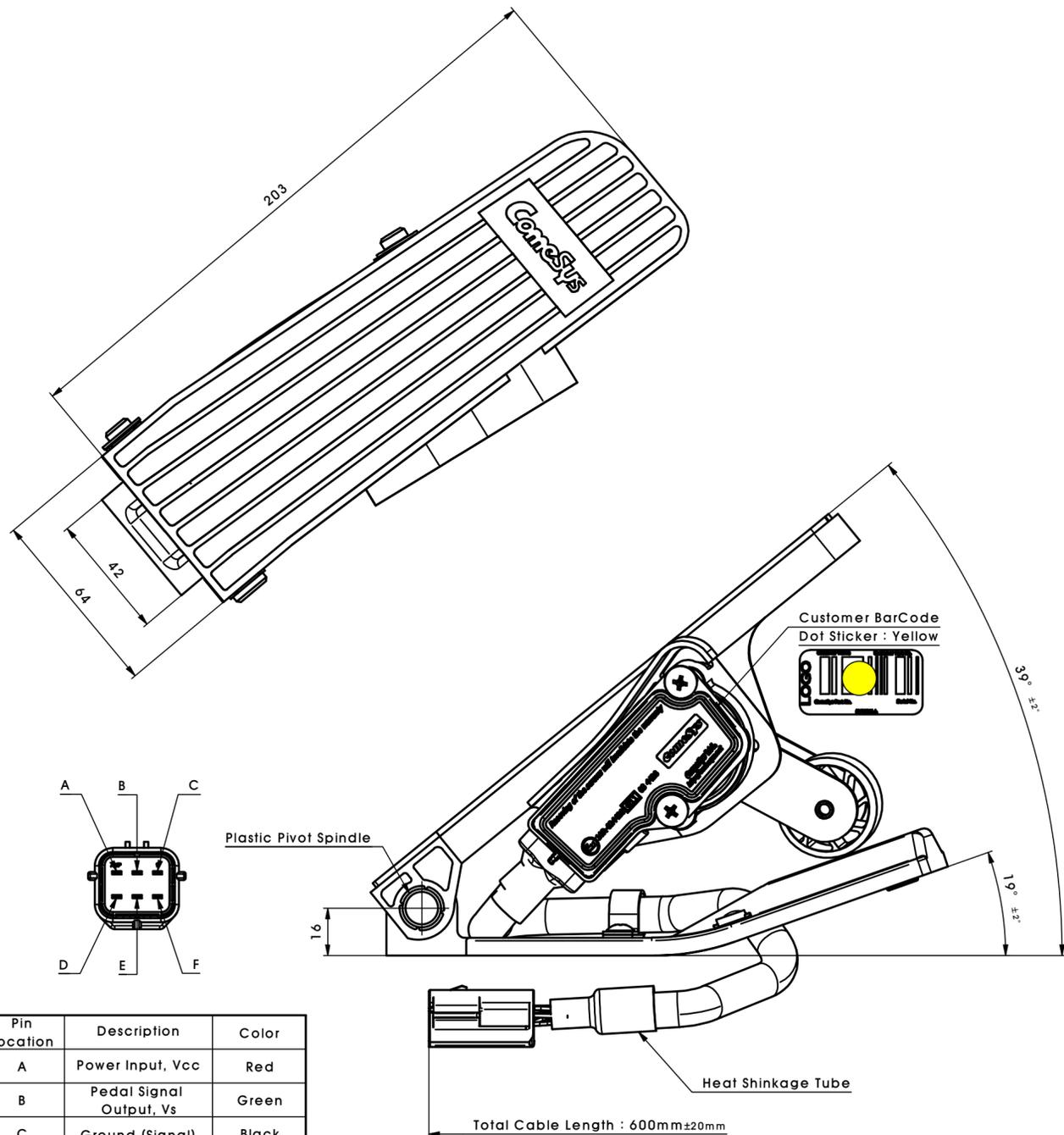


Part No. FZ3-512-471  
8159406

REVISION HISTORY					
REV	DESCRIPTION	DATE	DR	RE	AP
0	Issued	13.Jan.20	H.R.Lee	J.I.Kim	J.H.Lee



Pin Location	Description	Color
A	Power Input, Vcc	Red
B	Pedal Signal Output, Vs	Green
C	Ground (Signal)	Black
D	IVS SIG	White/Black
E	FS(IVS)Vcc	Blue
F	FS(IVS)SW GND	White

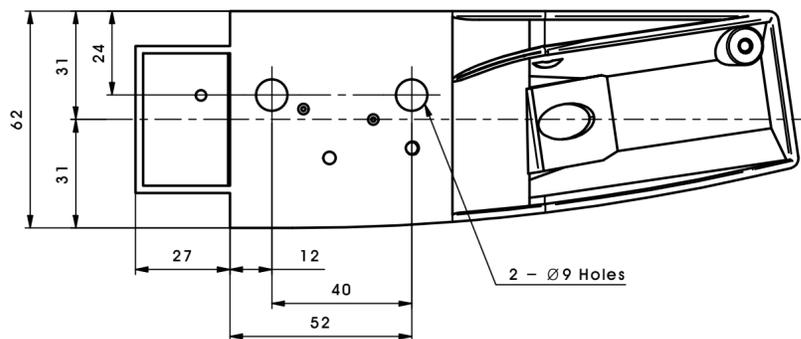


Fig. 1 Circuit Diagram

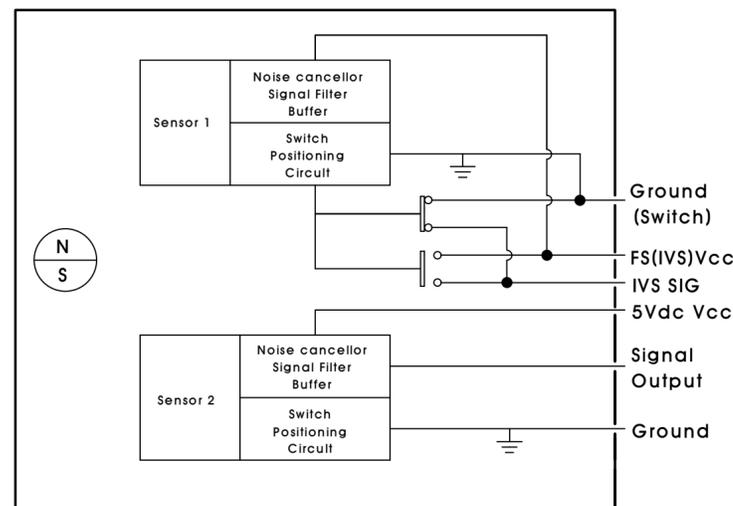


Fig. 2 Signal Output

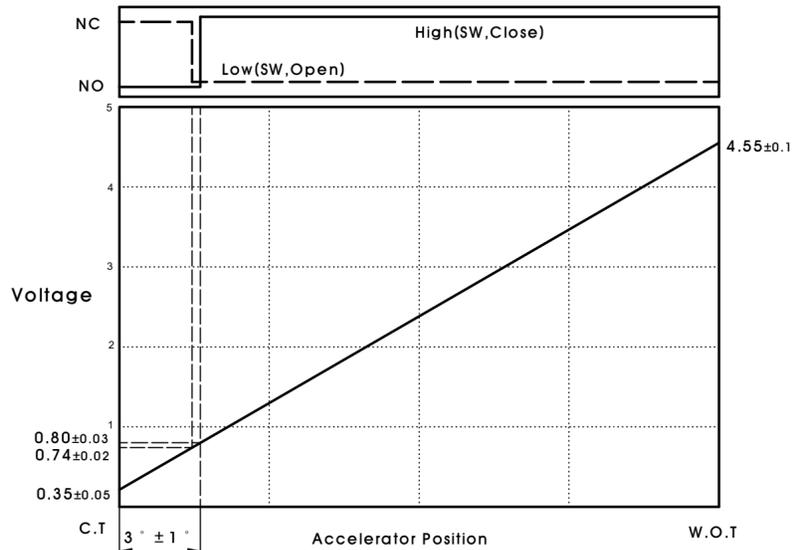
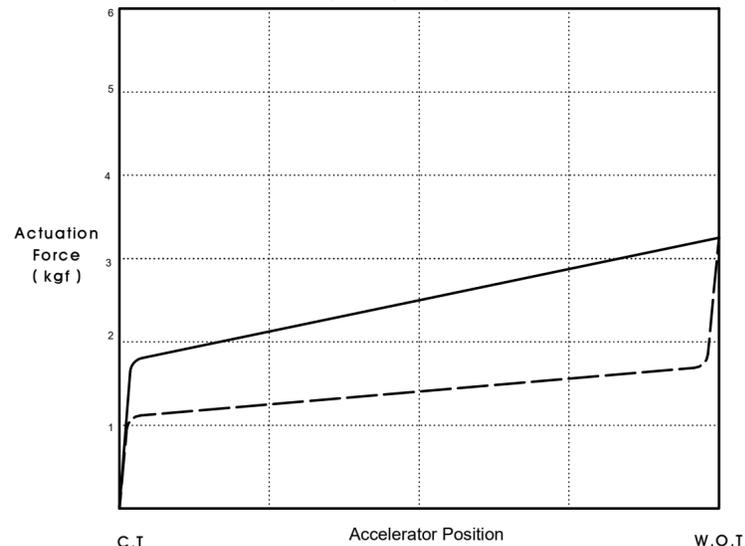


Fig. 3 Spring Force



- General Layout
  - Non - Contact Sensing Technology.
  - This drawing is satisfied with FMVSS124.
  - International Patent Pending.
- Mechanical Conditions
  - A static pedal force is applied at a point of 150mm from the pedal pivot axis and perpendicular to the pedal surface.
  - (Initial Load : 0.9kgf(MIN), Full Throttle : 3.3kgf(MAX))
  - End-Break force : 160kgf±5kgf will not damage any pedal parts.
  - Two return spring, inner and outer spring, incorporated to return pedal to idle on release of actuation force.
- Electrical Conditions
  - Environmental Conditions
    - Operating Temperature : -40°C ~ +85°C
    - Storage Temperature : -40°C ~ +105°C
  - Electrical Characteristics
    - Type of sensing element
      - Input Voltage(Vcc) : 5Vdc ± 2%
      - Ratiometric Operation Input Range : 4.5V~8V
      - Operation Current(Iop) : 20mA (Min), 30mA(Max)
      - Reverse Polarity : Withstand 10min
      - Electrical Travel : See Fig 2.
      - Independent Linearity : ± 2%
      - Signal Load : 10kohms, C=4.7nF Tested.
    - Type of Switch : MOSFET Switch (CLARE : CPC1030)
      - Switch max Load Current(Io) : 100mA (400mW)
      - Switch Operation Load Current(IF) : 5mA@80V
      - Switch Resistance(Ron) : Max 30Ω at Switch On
      - VL=350Vp, Current Leak Max 1μA at Switch Open (ILEAK)
      - Switch Polarity : No Polarity
      - Switch Voltage : Up to 80V
      - Switch Position
        - Switch Position shall be discussed at PO and fixed at factory before delivery.
      - The NO/NC voltage shall be set to vary for short circuit protection.
  - Mechanical Specifications
    - Mechanical Travel : 17.5 ± z
  - Electrical Connection
    - AMP J - Series Connector : for 6 wire 174264 - 2 (CAP)
  - Material
    - Pedal Foot Plate : PA66+GF30%+Anti Static
    - Pedal Bottom Plate : Aluminum (ADC12)
    - Cable : AEXf or AVXf ( 0.50mm<sup>2</sup> )
  - Marking
    - Sensor serial number and pedal production number shall be indicated and recorded before despatch at factory.
  - Durability
    - Subject to over 10 million cycles between idle and full throttle position at a rate of approx. 100 cycles per minute.
    - Any wear observed, e.g., on the mechanical stops checked to be in compliance with the initial condition values.
  - Environment Test

Item	Test Method	Decision Standard
Vibration Test	Subject to broadband random vibration between 20 and 2000Hz for 20hours in all 3 axis.	Normal Operation
Shock Test	After Exposed to Acceleration 20g (ZERO to PEAK) for 11ms	Normal Operation
Impact Test	Subject to a drop test onto a smooth concrete floor from a height of one meter a total of 6 times	Normal Operation
Temp. Test	After Exposed to -40°C ~ 85°C (100 cycles)	Normal Operation
Humidity Test	After Exposed to -32°C ~ 70°C (96%)	Normal Operation
Salt Fog Test	After Exposed to Salt Fog for 96 Hours (JIS Z2371)	Normal Operation
Chemical Test	Exposed to 3 second dipping in each of the test fluids, followed by a 3 minutes air dry	Normal Operation
ESD Test	Tested in accordance with IEC 61000-4-2 Spec	15KV(Air Discharge)
EMS Test	As per ISO 11452-2 (2004E)	100V/m

ComeSys Control & Measurement Systems Limited				Name	
General Tolerance for Machining (K3 & 0412)				Electronic Accelerator Pedal Ass'y	
Priority & Confidence				Application Model	
The information contained in this drawing is the sole property of ComeSys Ltd. Any reproduction in part or as a whole without the written permission of ComeSys Ltd is prohibited.				Clark Application C40/60	
http://comesys.net				Material	
Material				Part & Surface Treatment	
Weight				Heat Treatment	
Weight				582 g	
Customer Part No.				ComeSys Part No.	
Customer Part No.				8159406	
Sheet 1 of 1				ComeSys Part No.	
Sheet 1 of 1				FZ3-512-471	
Sheet 1 of 1				0	